

Influenza: Staff Vaccination Healthcare Worker Vaccination

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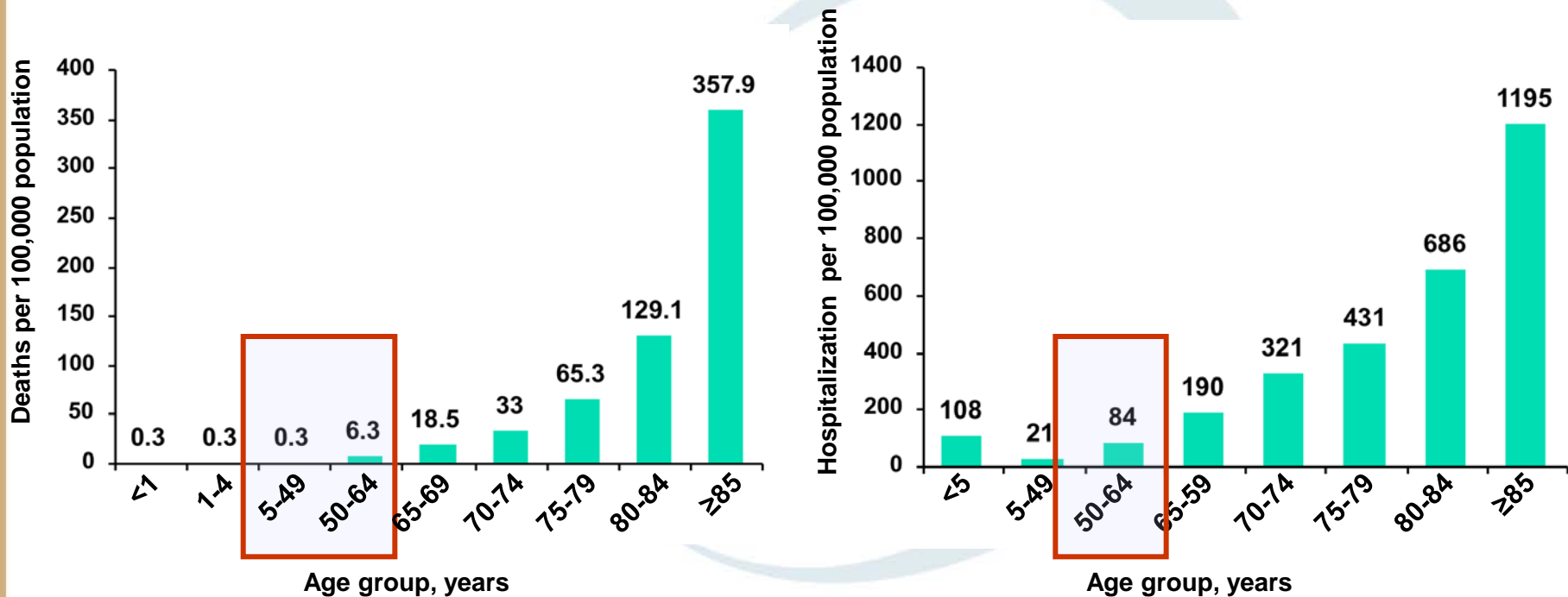
Objectives

- Reasons to vaccinate health care workers vaccinated
- Success in staff vaccination
 - ▢ What has worked
 - ▢ What doesn't work
- Myths
- Why me?

Influenza is a Serious Disease

- Influenza kills nearly some 40,000 people in the US annually
 - Influenza leads to the hospitalization of MANY more
- Influenza produces symptoms that lead to antibiotic prescriptions
 - Antibiotics do not work for influenza (antivirals can be effective)
 - Drug pressure leads to antibiotic-resistant bacteria
 - Affects all ages, but much of the MRSA and other antibiotic resistant prevalence has a seasonal variation
 - Examples of morbidity for which antibiotic is prescribed
 - Pneumonia, otitis, sinusitis, diarrhea
- Influenza leads to days off work
 - People who get influenza take off work
 - People whose children or dependent relatives get sick from influenza take days off work

Influenza Mortality and Hospitalization Rates by Age Group



Thompson WW, et al. *J Infect Dis.* 2006;194:(suppl 2) S92-S97.

Reasons to vaccinate health care workers

- Health care workers who become infected with influenza virus don't know they have influenza *half* the time
 - ▢ Often they attribute their symptoms to the “cold”
 - Even experts cannot distinguish influenza from other respiratory illnesses, such as the common cold
 - If influenza is known to be circulating, and their “cold” symptoms also cause fever, there's > an 80% chance it's due to influenza
 - ...but, influenza often does not produce a fever
 - ▢ They may not be aware of symptoms at all

Presentation of Clinical Influenza Differs by Age Group

Sign/Symptom	Children	Adults	Elderly
Cough (nonproductive)	++	++++	+++
Fever	+++	+++	+
Myalgia	+	+	+
Headache	++	++	+
Malaise	+	+	+++
Sore throat	+	++	+
Rhinitis/nasal congestion	++	++	+
Abdominal pain/diarrhea	+	—	+
Nausea/vomiting	++	—	+

++++ Most frequent sign/symptom
 + Least frequent
 — Not found

Cox N, Subbarao K. *Lancet*. 1999;354:1277-1282.

Cox N, Fukuda K. *Infect Dis Clin North Am*. 1998;12:27-38.

Staff who develop influenza might not know it

Reasons staff might not know they have influenza

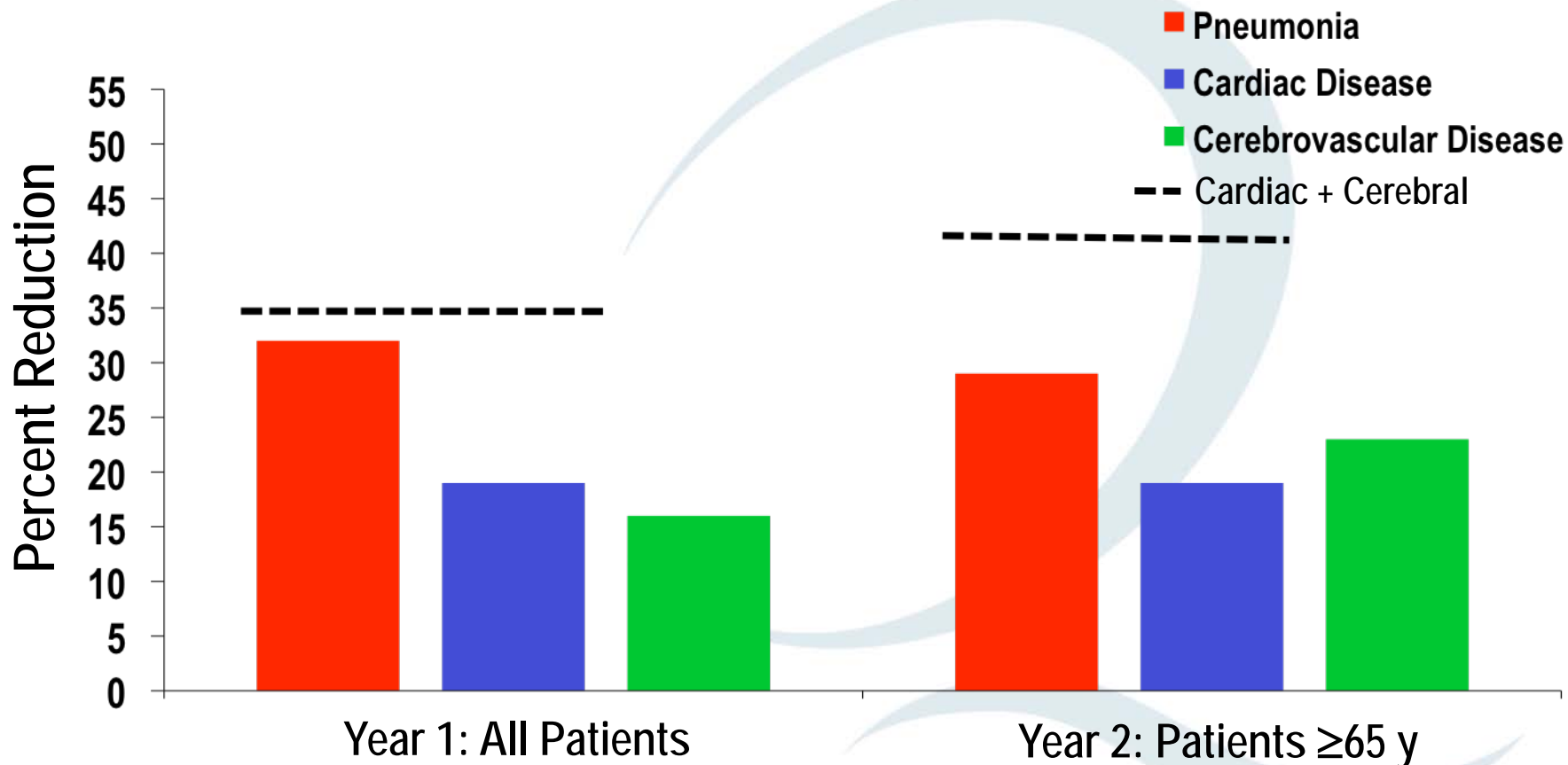
- ▢ No symptoms
- ▢ Discounting symptoms if present
- ▢ Work ethic misaligned with patient-care ethics
- ▢ Or might not think it's important as they don't understand how dangerous it might be for their patients

Reasons to vaccinate health care workers

- Do your health care workers know that:
 - ▢ Even if not recognizing their symptoms, they can still transmit influenza to others (their patient and their family)?
 - ▢ ...They can transmit it even if their patient has been vaccinated?
 - ▢ Their unvaccinated, frail elderly patient who catches influenza from them has a 20% chance of dying?
- Vaccinated health care workers are 70% less likely to get influenza
- 10-50% of health care workers get flu each year
- The business case: reduces work days lost, unnecessary overstaffing, and costly errors by those “filling in”

ACTION SUGGESTION: When a health care worker refuses vaccination, ask why not; teach the vaccinator to ask-back one-on-one questions (this is more effective for improving uptake for patients and staff)

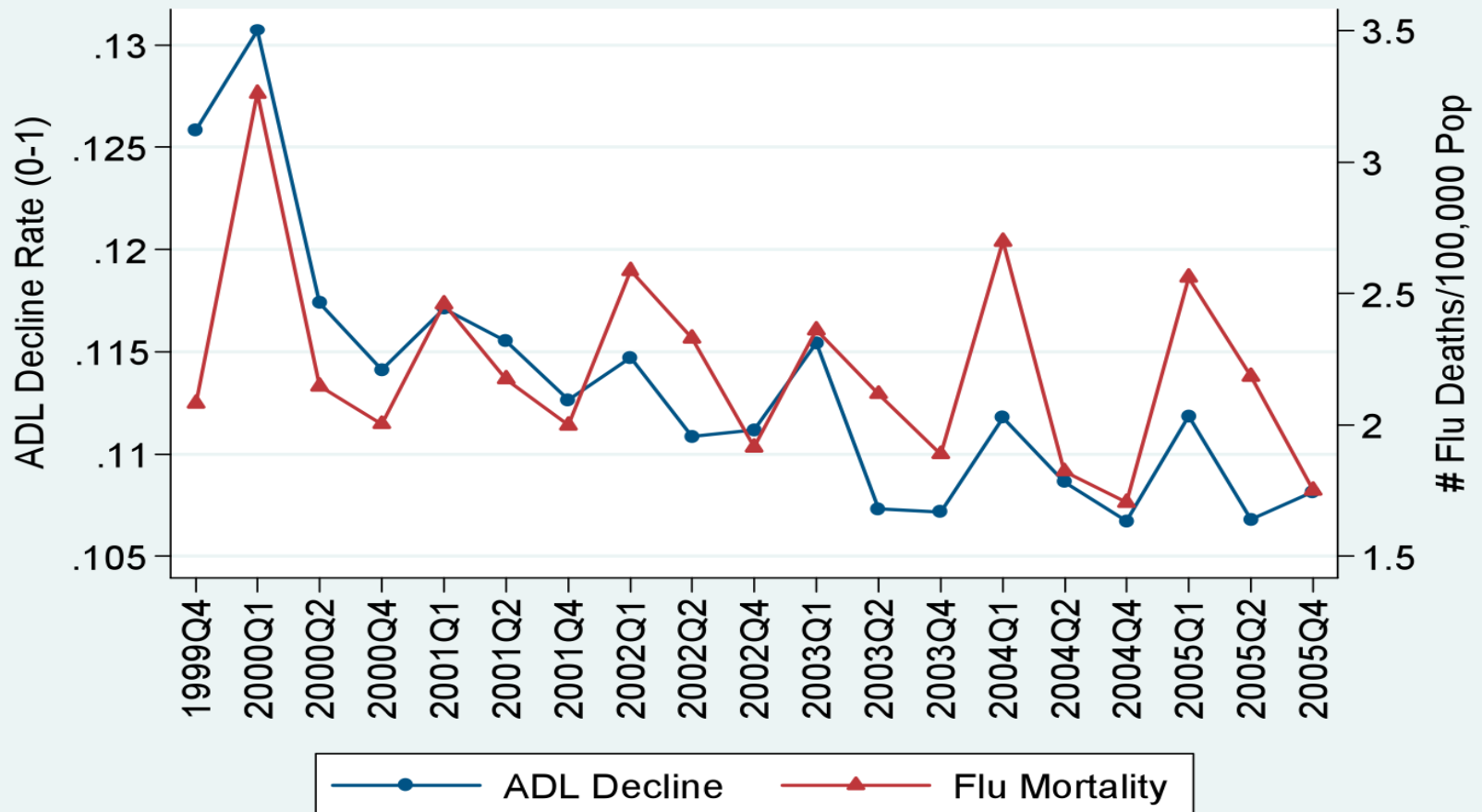
Influenza Vaccine Reduces Pneumonia, Cardiac, and Cerebrovascular Disease in Older Patients



Nichol KL, et al. *N Engl J Med*. 2003;348:1322-1332.

Influenza: Impact More than Mortality in Long-Term Care Settings

ADL Decline & Flu Mortality Rates: 1999-2005



Gozalo P, Feng Z, Gruneir A, Pop-Vicas A, Gravenstein S, Mor V. 2008 (Preliminary Data)

What gets staff vaccinated?

■ Education

▢ Safety

▸ Influenza vaccine is safe

- The association with influenza and Guillan Barre epiphenomenon has not recurred in over 30 years (1976)
- Manufacturing processes have improved dramatically over the last decades

▸ Influenza vaccine does not cause influenza

- ▢ Risks—similar to placebo, except the sore injection site
- ▢ Benefits: beyond personal, and include employer
- ▢ Personal accountability to their residents and co-workers

■ BUT, education is not enough (although it is the cornerstone of what is needed to get the buy-in)

- ▢ Consistently less than half of health care workers get immunized nationally

What gets staff vaccinated?

- Systematic vaccination program
 - ▢ Vaccine access
 - Availability at facility
 - Availability around the clock
 - ▢ Employee vaccination policy
 - Active declination
 - Who can give vaccine
 - ▢ Positive reinforcement of vaccine acceptance
- Not the business case

What gets staff vaccinated?

SYSTEM LEVEL ACTION SUGGESTIONS:

Vaccine available at every nurse's station

Any one who can give shots may administer the flu shot

Active declination: have to sign that they refuse vaccine, and record "why"

CONSIDER:

Program for unit with the highest success in staff vaccination gets special recognition

Recognition of getting the vaccine pin "We care" or "we care enough to get shot for you", etc.

Myths

- If you vaccinate the patients, you do not need to vaccinate staff
 - NO—you need two shields to prevent the flu
- Vaccine contains unsafe preservative
 - NO—the preservatives are safe, and single dose (pre-filled syringes) are preservative-free
- I get flu from the shot
 - NO, NO, NO!
- You can't trust public programs
 - It's not just a public program: every major body (CDC and all major medical trade associations) recommends this
 - 15% are afraid of needles
- I can wait until flu is here to get my shot

Why me?

- Because I get the privilege of caring
 - The gift of being allowed to care for the intimate parts of others' lives
 - It comes with the responsibility of keeping me from causing their illnesses
- I get the shot every year because I care about my patients, my family, my co-workers...and, me

ACTION SUGGESTION:

Make it about the worker and why they do what they do

Web Resources

- NH Immunization Toolkit (updated for 2007)
 - <http://medqic.org/dcs/ContentServer?cid=1105558764854&pagename=Medqic%2FMQTools%2FToolTemplate&c=MQTools>
- Brochure for health care professionals as overview of Medicare's coverage of influenza, pneumococcal, and hepatitis B vaccines and their administration.
 - http://www.cms.hhs.gov/MLNProducts/downloads/Adult_Immunization.pdf
- **Adult Immunizations**, ICN# 006435. Immunization of health-care workers: recommendations of the Advisory Committee on Immunization Practices (ACIP) and the Hospital Infection Control Practices Advisory Committee (HICPAC).
 - <http://medqic.org/dcs/ContentServer?cid=1116947560736&pagename=Medqic%2FMQLiterature%2FLiteratureTemplate&c=MLiterature>
- Pandemic Flu Workplace Planning
 - <http://www.pandemicflu.gov/plan/workplaceplanning/index.html>
- Nick the Flu Change Package
 - <http://www.medqic.org/dcs/ContentServer?cid=1122904859530&pagename=Medqic%2FMQTools%2FToolTemplate&c=MQTools>
- A Call to Action: Influenza Immunization Among Health Care Workers (free). Business case information is on page 3.
 - <http://www.nfid.org/pdf/publications/calltoaction.pdf>
- AMDA Immunization Toolkit (requires purchase)
 - Information and pricing: <http://www.amda.com/resources/whatsnew2006.cfm#toolkit>
 - Order form: <http://www.amda.com/resources/orderform.cfm>

Acknowledgements

- Greg Poland, MD, Mayo Clinic



- American Medical Directors Association, Clinical Practice Guideline
- CDC Adult Immunization Practices Advisory Committee